Attorney Docket No. TSEN.P001

In the Claims

The claims as they currently stand are as follows.

1   1.   (Original)   A communications system, comprising:

2   a plurality of mobile devices that each include a network subsystem and a

3   positioning subsystem, the network subsystem automatically assembling a wireless

4   network among the mobile devices for information transfer and automatically assigning

5   at least one unique identification number to each mobile device, the positioning

6   subsystem automatically generating position information of each mobile device; and

7   at least one control system coupled for information transfer with the plurality of

8   mobile devices, the control system tracking and mapping individual positions of each

9   mobile device using the position information and identifying each mobile device on the

10   map using the identification number.

1   2.   (Original)   The system of claim 1, wherein communications among the mobile

2   devices and the control system occur using at least one of High Frequency (HF)

3   communications, Very High Frequency (VHF) communications, Ultra High Frequency

4   (UHF)/microwave communications, cellular communications, satellite

5   communications, and Public Switched Telephone Network (PSTN) communications.

1   3.   (Original)   The system of claim 1, wherein the positioning subsystem includes

2   at least one of a Global Positioning System (GPS), a Radio Frequency

3   Identification/Direction Finding (RFID/DF) system, an infrared (IR) system, an

4   acoustic system, a triangulation system, and a signaling system.

1   4.   (Original)   The system of claim 1, wherein the information transfer includes

2   voice information and data.

1   5.   (Original)   The system of claim 1, wherein the identification number is a

2   media access control (MAC) address, wherein the MAC address is associated with

2

Attorney Docket No. TSEN.P001

3 routing packets having modified priorities, wherein the routing packets are high quality
4 packets that provide reliable communication between the plurality of mobile devices
5 and the control system.

1 6.   (Original)   The system of claim 1, wherein the control system further
2 comprises a graphical user interface (GUI) that displays the individual positions of each
3 mobile device on a three-dimensional map.

1 7.   (Original)   The system of claim 1, wherein the identification number is a
2 media access control (MAC) address, wherein location-based multicast group Internet
3 Protocol (IP) addressing is used to map the individual positions of each mobile device
4 within an incident scene.

1 8.   (Original)   A portable communication device, comprising:
2 a network system that automatically assembles a wireless network among other
3 portable communication devices and control devices in an area and automatically
4 assigns a unique identification number to each portable communication device;
5 a communication system that receives and transmits voice and data
6 communications over the wireless network using at least one of High Frequency (HF)
7 communications, Very High Frequency (VHF) communications, Ultra High Frequency
8 (UHF)/microwave communications, cellular communications, satellite
9 communications, and Public Switched Telephone Network (PSTN) communications;
10 and
11 a positioning system that includes Global Positioning System (GPS) components
12 and at least one location sensor, the positioning system automatically determining a
13 position of the device periodically and automatically transferring the position to at least
14 one of the control devices via the wireless network.

1 9.   (Original)   A method for automatically tracking and communicating among
2 mobile devices, comprising:

3

Attorney Docket No. TSEN.P001

3   automatically assembling a wireless network among a plurality of mobile devices

4 and control systems in an area, wherein assembling includes adding mobile devices and

5 control systems to the wireless network as they arrive in the area and removing mobile

6 devices and control systems from the wireless network as they depart the area;

7   receiving voice and data communications from each of the mobile devices of the

8 wireless network, wherein the data communications include position and identification

9 information of each mobile device of the wireless network;

10   tracking a position and status of a mobile device using the position and

11 identification information; and

12   generating a map of an engagement and displaying individual positions, tracks,

13 and identifications of each mobile device of the wireless network using the position and

14 identification information.

1 10. (Original) The method of claim 9, further comprising:

2   comparing information of the voice and data communications with historical

3 scenario and response information;

4   generating predictions of engagement progress using results of the comparison;

5   displaying the predictions on the map; and

6   updating the historical scenario and response information to include at least one of

7 the information of the voice and data communications and the generated predictions.

1 11. (Original) The method of claim 9, further comprising:

2   comparing information of the voice and data communications with historical

3 scenario and response information;

4   generating recommended courses of action using results of the comparison;

5   displaying the recommended courses of action on the map; and

6   updating the historical scenario and response information to include at least one of

7 the information of the voice and data communications and the generated recommended

8 courses of action.

4

1   12. (Original)   The method of claim 9, wherein tracking a position and status

2   further comprises:

3   generating a historical position trace for each first responder; and

4   displaying the position trace on the map.

1   13. (Original)   ·The method of claim 9, further comprising receiving sensor data

2   from at least one sensor of at least one mobile device.

1   14. (Original)   The method of claim 13, further comprising:

2   comparing the sensor data with historical scenario and response information;

3   generating predictions of engagement progress using results of the comparison;

4   displaying the predictions on the map; and

5   updating the historical scenario and response information to include at least one of

6   the sensor data and the generated predictions.

1   15. (Original)   The method of claim 14, further comprising generating

2   recommended courses of action using at least one of the results of the comparison and

3   the predictions.